## What is claimed is:

5

- 1. An integrated high-ohmic polycrystalline silicon resistor comprising a substrate (1), a dielectric substance (2), a resistance layer and contacts (4), the resistance layer consisting of a polycrystalline layer (3) of SiGe:C and the polycrystalline layer (3) being doped with doping elements, in particular boron or phosphorus.
- 2. A method of fabricating an integrated high-ohmic polycrystalline silicon resistor of claim 1, characterized by the method steps of:

- precipitating a dielectric substance (2) on a substrate (1), in particular a silicon wafer,

forming a polycrystalline layer (3) of SiGe:C, the polycrystalline layer (3) being carried out by in situ precipitation of SiGe:C or implantation of Si with Ge C followed by annealing, \*)

- doping the polycrystalline layer (3) with doping elements, in particular boron or phosphorus;
- further precipitation of the dielectric substance (2) and fabricating the metallic contacts (4).
- \*) Something is amiss in this section of the German claim. It should (in English translation) correctly state: "...,the formation of the polycrystalline layer (3) being carried out...." (Translator's note).

25

20

Ace B

30